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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,468	07/21/2003	Chung-Kun Cho	030681-535	4531
21839	7590 03/14/2006		EXAMINER	
	N INGERSOLL PC	WEINER, LAURA S		
(INCLUDING BURNS, DOANE, SWECKER & MATHIS) POST OFFICE BOX 1404			ART UNIT	PAPER NUMBER
	EXANDRIA, VA 22313-1404 1745			<del></del>

DATE MAILED: 03/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	
		10/622,468	CHO ET AL.	
	Office Action Summary	Examiner	Art Unit	
		Laura S. Weiner	1745	
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet	with the correspondence address	s
A SH WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DA nsions of time may be available under the provisions of 37 CFR 1.1: SIX (6) MONTHS from the mailing date of this communication. It period for reply is specified above, the maximum statutory period v re to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUN 36(a). In no event, however, may will apply and will expire SIX (6) M cause the application to become	NICATION. a reply be timely filed  ONTHS from the mailing date of this commun. ABANDONED (35 U.S.C. § 133).	
Status				
2a)⊠	Responsive to communication(s) filed on <u>01 Fe</u> This action is FINAL. 2b) This Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final.		rits is
Dispositi	ion of Claims		•	
5)□ 6)⊠ 7)⊠	Claim(s) <u>1 and 4-11</u> is/are pending in the application of the above claim(s) <u>7-11</u> is/are withdrawn Claim(s) <u>is/are allowed.</u> Claim(s) <u>1,4 and 5</u> is/are rejected.  Claim(s) <u>6</u> is/are objected to.  Claim(s) <u>are subject to restriction and/organical subject to restr</u>	from consideration.		
Applicati	on Papers			
10)	The specification is objected to by the Examine The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the o Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	epted or b)  objected t drawing(s) be held in abey ion is required if the drawi	ance. See 37 CFR 1.85(a). ng(s) is objected to. See 37 CFR 1.	· ·
Priority u	ınder 35 U.S.C. § 119			
a)[	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the priori application from the International Bureau see the attached detailed Office action for a list of	s have been received. s have been received in ity documents have bee t (PCT Rule 17.2(a)).	Application No en received in this National Stag	e
2) 🔲 Notice 3) 🔲 Inforn	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) ' No(s)/Mail Date	Paper No	v Summary (PTO-413) b(s)/Mail Date I Informal Patent Application (PTO-152) 	

### **DETAILED ACTION**

#### Election/Restrictions

Claims 7-11 are withdrawn from further consideration pursuant to 37 CFR
 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or

linking claim. Election was made without traverse on 10-31-05.

# Claim Rejections - 35 USC § 102

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by McCullough, Jr. et al. (4,965,146).

McCullough et al. teaches in claims 1-2, a battery comprising an anode comprising an alkali metal, alkali metal alloy, a cathode and a separator surrounding the anode where the separator is coated with a film of lithium nitride. McCullough et al. teaches in claim 6 that the alkali metal is lithium.

# Claim Rejections - 35 USC § 103

3. Claim 5 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over McCullough, Jr. et al. (4,965,146).

McCullough et al. teaches in claims 1-2, a battery comprising an anode comprising an alkali metal, alkali metal alloy, a cathode and a separator surrounding the anode where the separator is coated with a film of lithium nitride. McCullough et al. teaches in claim 6 that the alkali metal is lithium.

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In the event any differences can be shown for the product of the product by process claim 5, as opposed to the product taught by McCullough et al., such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results. *In re Thrope 227 USPQ 964; (Fed. Cir. 1985*).

With respect to the product by process claims 5, the determination of patentability is based upon the product itself not upon the method of its production. *In re Thrope 227 USPQ 964; In re Brown 173 USPQ 685; In re Bridgeford 149 USPQ 55; In re Wertheim 191 USPQ 90.* Any difference imparted by the product by process limitations would have been obvious to one having ordinary skill in the art at the time the invention was made because where the Examiner has found a substantially similar product as in the applied prior art, the burden of proof is shifted to the Applicants to establish that their product is patentably distinct. *In re Brown 173 USPQ 685 and In re Fessmann 180 USPQ 324.* 

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCullough, Jr. et al. (4,965,146).

McCullough et al. teaches the claimed invention except does not specify that the lithium nitride film has a thickness of 0.01-5 um but it would be within the skill of the ordinary person to have a layer of thickness of 0.01-5 um depending on the efficiency and cost requirements.

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a lithium nitride layer thickness of 0.01-5 um, since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller, 105 USPQ 233.* 

### Allowable Subject Matter

5. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura S. Weiner whose telephone number is 571-272-1294. The examiner can normally be reached on M-F (6:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura S Weiner Primary Examiner Art Unit 1745

March 8, 2006